2012-08-03 V1.00.000

Trademark Information

LAUNCH is a registered trademark of LAUNCH TECH. CO., LTD. (short for LAUNCH) in China and other countries. All other LAUNCH trademarks, service marks, domain names, logos, and company names referred to in this manual are either trademarks, registered trademarks, service marks, domain names, logos, company names of or are otherwise the property of LAUNCH or its affiliates. In countries where any of the LAUNCH trademarks, service marks, domain names, logos and company names are not registered, LAUNCH claims other rights associated with unregistered trademarks, service marks, domain names, logos, and company names. Other products or company names referred to in this manual may be trademarks of their respective owners. You may not use any trademark, service mark, domain name, logo, or company name of LAUNCH or any third party without permission from the owner of the applicable trademark, service mark, domain name, logo, or company name. You may contact LAUNCH by visiting LAUNCH http://www.cnlaunch.com, or writing to Launch Industrial Park, North of Wuhe Rd., Banxuegang, Longgang, Shenzhen, Guangdong, P. R. China, to request written permission to use Materials on this manual for purposes or for all other questions relating to this manual.

Copyright Information

Copyright © 2012 by LAUNCH TECH. CO., LTD. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical,

photocopying, recording or otherwise, without the prior written permission of LAUNCH. The information contained herein is designed only for the use of this unit. LAUNCH is not responsible for any use of this information as applied to other units.

Neither LAUNCH nor its affiliates shall be liable to the purchaser of this unit or third parties for damages, losses, costs, or expenses incurred by purchaser or third parties as a result of: accident, misuse, or abuse of this unit, or unauthorized modifications, repairs, or alterations to this unit, or failure to strictly comply with LAUNCH operating and maintenance instructions.

LAUNCH shall not be liable for any damages or problems arising from the use of any options or any consumable products other than those designated as Original LAUNCH Products or LAUNCH Approved Products by LAUNCH.

General Notice

Other product names used herein are for identification purposes only and may be trademarks of their respective owners. LAUNCH disclaims any and all rights in those marks.

Thank you for buying and using this tire changer. This introduction is the important information for this kind of production. Please read the instruction carefully before using or fixing the machine. Please take good care of it. So that it can develop it advantages.

Safe rules

- The machine should be fixed in a safe place according to the safe rule. The position must ventilate and be sure that there is enough space around it.
- If we put the machine is in the open air. You must put up a shed to prevent it from the sun, the rain. You shouldn't use it, when there are inflammable cargo and perishable goods around it.
- Don't fix the machine in a place where it is too hot or too wet.
- Too much dust ammonia alcohol thinner or spray and bond are not allowed on the surface of the machine.
- If you want to operate the machine without cutting off the electricity . You should have the specialize knowledge.
- The person without being trained can't operate the machine.
- When using this machine .If you are not the people who operate the machine.
 - ♦ Don't stand close to the warning sign .Don't remove it.
 - ♦ If you operate the machine incorrectly. Our company will not be responsible for it.

Table of contents

1 Product Instruction	1
1.1 External Structural Drawing 1.2 Technical parameters 1.3 Packing List	2
2 operation	4
2.1 Locking tighten of the tire 2.2 Ways of using locking tighten paws 2.3 Use the tool arm: 2.4 Removing and fixing the tire without inner tube. 2.4.1 Reducing the pressure and lubricating 2.4.2 Removing the tire without inner tube 2.4.3 Fixing the tire without inner tube 2.5 Removing and fixing the tire with inner tube	
2.5.1 The lubricant of the tire with inner tube. 2.5.2 Removing the tire with inner tube. 2.5.3 Fixing the tire with inner tube. 2.6 Removing and fixing the tire with opening mouth press bar 2.6.1 Removing the tire with opening mouth press bar 2.6.2 Fixing the tire with opening mouth press bar.	
3 Maintenance	9
3.1 General Maintenance	
Appendix I: Operational principle drawing	10
Appendix II: Circuit diagram	10
Appendix III: CE Declaration of Conformity	11

1 Product Instruction

1.1 External Structural Drawing

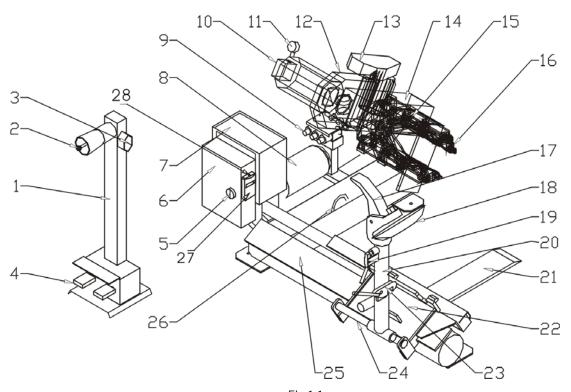


Fig 1.1

- 1.Moveable control part
- 3.Block plate switch
- 5. Electrical switch
- 7.Tool box
- 9. Hydraulic pressure valve
- 11.Pressure watch
- 13.Belt cover
- 15.Block plate
- 17.Decompression
- 19. Orientation part
- 21.A lifting car
- 23.Tool arm hook
- 25. Paralleling side way
- 27. Telecontrol controller

- 2. Crossing switch
- 4.Pedal switch
- 6.Mixing electric box
- 8.Oil tank
- 10.Circumvolve envelop
- 12.Worm wheel box
- 14. Swing arm
- 16.Locking paws
- 18.Plate
- 20.Tool arm
- 22.Paralleling board
- 24. Tool arm slide way
- 26.Condole ear
- 28. Telecontrol receiver

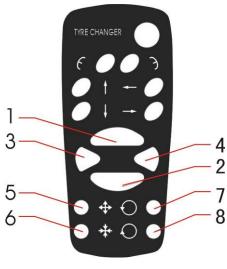


Fig1.2

Signification for remote handle key-press

1 swinging arm (14) upward2 swinging arm (14) downward5 Four blocking paws open6 Four blocking paws close

3 small paralleling board left 7 four blocking paws will turn in clockwise

4 small paralleling board right 8 four blocking paws will turn in anti-clockwise direction

1.2 Technical parameters

Specifications	Parameters
Lift height	830~1500mm
Exterior size	2400×1920×830mm
Machine weight	1600kg
The range of bold plate	14"~56"
Hydraulic pressure pump power unit	1.1kw 220v/380v/1PH/3PH
Gearbox motor	2.2kw 220v/380v/1PH/3PH
Speed	7.34 r/min
Moveable control operation supply	24V
The range of the iron circle	14"~56"
Max wheel diameter	2300mm
Max wheel width	1065mm

1.3 Packing List

SN	Part Number	Description	Quantity	Remark
1	TWC-802	tire changer	1set	
2		Operation Manual	1 pc	
3		Crowbar	2 pcs	
4		Assist clip	1 pc	
5		Remote controller	1 pc	
6		Aluminum protector	1set/4pcs	
7		Extended rod	1set/4pcs	FEE

2 operation

2.1 Locking tighten of the tire

- Put the tire on the lifting car and move the car.
- Automatically fixing heart blocking plate will produce high pressure (see Fig2.1). The range of the adjusting is 2-20 mp. Pressure watch will show the pressure. If the wheel circle is very thin. You should reduce the pressure.
- If mounting/demounting the truck tire, the pressure meter is lower than 18Mpa, turn the pressure switch up so that to increase the pressure.

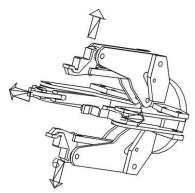
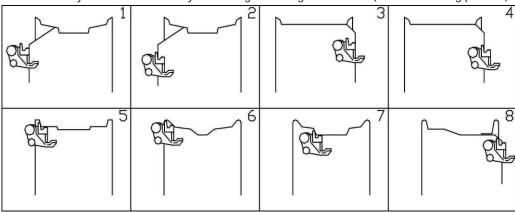


Fig2.1

Note: Blocking plate can lock all kinds of wheel circle from 14" to 56".

2.2 Ways of using locking tighten paws.

There are four locking tighten paws in the blocking plate. It can lock the different kinds of wheel circle. There are many different kinds of ways of locking according to the wheel (see the following pictures).



Usually vacuum tire use the 1 and 2 methods and the tire with press bar use the 3 and 4 methods.

2.3 Use the tool arm:

- 1) The tool arm has four holes. The first hole can mount/demount the tire of 40-56". Enter the 2-4 hole after you rotate 360°
- 2) The second hole can mount/demount the tire of 30-40".
- 3) The third hole can mount/demount the tire of 22-36".
- 4) The fourth hole can mount/demount the tire of 14-22"

2.4 Removing and fixing the tire without inner tube.

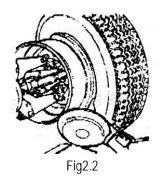
2.4.1 Reducing the pressure and lubricating.

- 1) Check if the locking tighten hook hooks the lifting board. The removing and fixing hook mustn't be in the position of working.
- 2) Make sure the tire has been clipped; there is no air in the tire.

- 3) Adjust the position of the tire. The plate has just been away from the rim. Make it be close to the rim.
- 4) When you turn around the tire, move the tool arm and press the tire down until tire is separated with the rim.
- 5) Put more lubricant between the rim and edge of the tire.
- 6) Make the plate prick up the tool arms, put the plate on the other side of the tire, until other side of the tire is separated with the rim, put some lubricant in it.

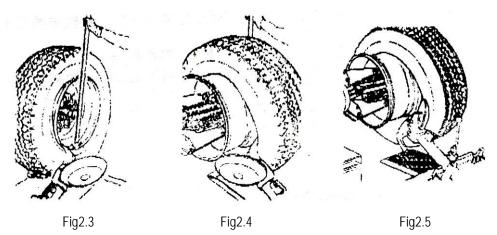
Pay attention:

Lubricant must be put. When you reduce the pressure outside you should follow anti-clockwise direction. When you reduce the pressure inside, you should follow clockwise direction. When you reduce the pressure inside, removing and fixing hook must be in the position of Fig2.2.



2.4.2 Removing the tire without inner tube

- 1) Move the tool arm to the outside of the tire, make removing hook face the tire Make sure that locking tighten hook has tightened. Orientation parts are in its position.
- 2) Adjusting the position between removing hook and the tire. The removing hook must be in the position between the edge of the tire and the rim. Move the fool arms so that the removing hook can insert the tire at the same time, it can pull the edge of the tire outside.
- 3) Press the tire, move the tool arms outside little by little. Repeat this action, let the removing hook swing downward so that the removing hook can pull the edge of the tire(see Fig2.3).
- 4) Turn the tire in the anti-clockwise direction, until the whole tire has been separated.
- 5) Move the tool arm to the inside pull the edge of the inner tube also moves it to the outside of the rim. Turn the tire, until the edge of inside separated from the rim. (see Fig2.4)
- 6) We can use plate to remove the edge of the inside tire by pushing the edge of the tire out of the rim. Press the tire down. Make the plate between the rim and the edge of the tire. Turn the tire (Fig2.5). You can see crow to help you.

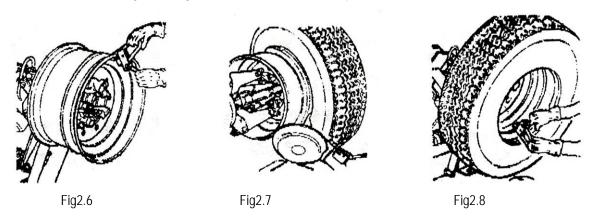


Attention:

You must be concentrated, examine the movement parts carefully, and avoid it from damage. Examine the tire when it was weighted. Adjust the position of tool head and rim. Removing and fixing hook must be in the position of 2.3. When you use plates.

2.4.3 Fixing the tire without inner tube

- 1) Lubricate the wheel circle and the edge of tire.
- 2) Tighten the outside of the tire in the highest position by using wheel circle clip (Fig2.6).
- 3) Adjust the position of iron circle by using the lifting car. Make sure that the wheel circle clip is in the highest position of rim. Adjust the angle of the tire, and make the tire and rim cross together.
- 4) Adjust the position of removing and fixing hook. The position of it must between rim and the edge of the tire. The distance to the edge of tire is about 5mm (Fig2.7). Turn the tire in the clockwise direction. The tire is fixed.
- 5) Prick up the tool arm; unload wheel circle clip push the tire inside. Fix the wheel circle clip on the rim and turn it to the upward of the removing and fixing hook (Fig2.8).
- 6) Adjust the position of the removing and fixing hook and make it between the edge of tire and rim. The distance to the rim is about 5mm. Turn the tire, until the outside edge of the tire has been fixed.
- 7) Take out the removing and fixing hook. Take the wheel circle clip out.



Attention:

When you remove and fix the tire. Orientation and Locking tighten hook of tool arm must be in the position of working.

2.5 Removing and fixing the tire with inner tube.

2.5.1 The lubricant of the tire with inner tube.

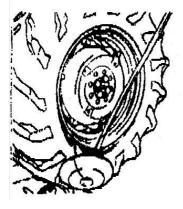
- 1) When you let the air out, open the pipe of the fixing gas mouth, press it in the tire, so that there isn't obstruct.
- 2) Repeat 2.4.1 action.

Notice: Because there is inside tire in it. After finishing the action of reducing pressure, you should stop moving the plate, so that use won't damage the inside tire. The clamping force can been adjusted when mounting/demounting the tire, the pressure of pumping station is adjusted to 20Mpa,the pressure relay30 is adjusted to 18 MPa, during mounting/demounting the tire, you may turn the pressure switch up. Please must turn the pressure switch down after finish demounting tire.

2.5.2 Removing the tire with inner tube.

1) Removing the outside edge of the tire. The same as 2.4.2.Hook the edge of the tire with removing and fixing hook. Insert a crown, sledge the outside edge of the tire by pressing the crown down and lower the tire down. The distance between the head of the removing and fixing hook and the edge of the tire is about 5mm (Fig2.9). Turn the tire in the anti-clockwise direction; you can remove the outside edge of the tire.

2) Removing the inside edge of the tire: Pick up the tool arm, lower the tire down and make it touch the lifting car. Move the lifting car outside, you can take the tire out by using the lifting car, you can get the inside tire out. After doing it, the action is just the same as the course (Fig2.10). Remove the inside edge of the tire.



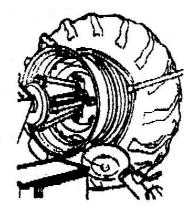


Fig2.9

Fig2.10

2.5.3 Fixing the tire with inner tube.

- 1) Put some lubricant on the edge of the tire and the rim.
- 2) You should fix the wheel circle clip in the highest place of the rim. Make sure the wheel circle clip block the wheel circle (Fig2.11).
- 3) Put the tire on the lifting car. Lower the wheel circle (wheel circle clip must be in the highest position). Make the wheel circle hook the side of the tire.
- 4) Raise the wheel circle; turn the tire in the anti-clock wise direction little by little. The tire can lean automatically.
- 5) Adjust removing and fixing hook and you can hook the edge of it from inside. Turn the tire in the clockwise direction until the edge of the tire is finished. Take the wheel circle clip (Fig2.12).
- 6) Turn the tire the gas hole faces the bottom.
- 7) Lower the wheel circle let the tire get close to the lifting car. Move the lifting car outward, you can use lifting car to help you move the tire a certain distance away.
- 8) Put the inside tire in it. Turn the iron circle in the clockwise direction, put the inside tire in the rim.
- 9) Put a little gas in the tire. So that, it won't be broken when we fix it.
- 10) Lifting the tire and fixing the wheel circle clip outside the rim. It is 20cm to the right of the gas mouth. Turn the tire until the wheel circle is in the position of nine o'clock.
- 11) Adjusting the equipment of the removing and fixing hook. It is 5mm to the rim.
- 12) Turn the tire in the clockwise direction until the tire is fixed on the rim.
- 13) Lower down the tire and check if the gas hole is exactly faces the hole.
- 14) If the position is mot exact, let the tire lean on the lifting car. Turn the wheel circle little by little.

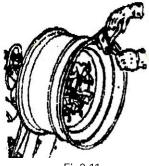


Fig2.11

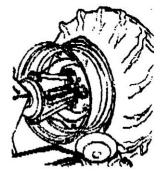
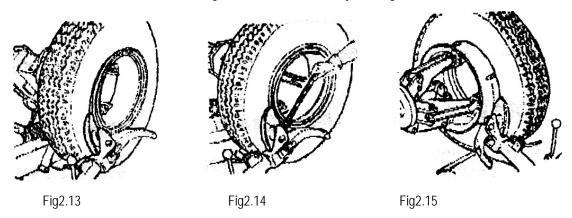


Fig2.12

2.6 Removing and fixing the tire with opening mouth press bar

2.6.1 Removing the tire with opening mouth press bar

- 1) Fix the tire as above. Make sure there is no air in the tire.
- 2) Adjust the plate and make it face to the tire, and get close to it.
- 3) Turn the tire, and move the tool arms towards inside. If the edge of the tire has been separated. Stop moving so that we couldn't damage the inside tire (Fig2.13).
- 4) Sledge the press bar with crow in the opening and pull if with plate. Turn the tire in the anti-clockwise until the press bar to fall down (Fig2.14).
- 5) Insert gas mouth inside the tire.
- 6) Put the plate on the other side of the tire. Push and turn the tire, until half of the tire has been pushed out (Fig2.15).
- 7) Lower the tire, make tire touch the lifting tire car, move if outside, you can get tire.



2.6.2 Fixing the tire with opening mouth press bar.

- 1) Fix the wheel circle; put the hole in the gas mouth in the bottom. Brush lubricant in it.
- 2) Put the tire with inside tire on the lifting car the gas mouth should be put in the bottom.
- 3) Move the lifting car; make the tire enter the iron circle.
- 4) You can turn the circle little by little. Adjust the position of the gas mouth.
- 5) Make the plate face the tire, press the blocking circle and the opening mouth press bar. Turn the tire and the fixing is over (Fig2.16).
- 6) Prick up arm tools, remove tire (Don't charge the tire on the equipment).

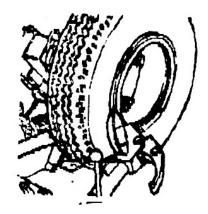


Fig2.16

3 Maintenance

3.1 General Maintenance

- You must follow the instructions on cleaning periodically.
- You should cut off the power supply.
- Clean the machine itself and the movement parts (slide way, blocking plate, etc.).
- Cleaning the following parts periodically by adding some lubricant (slide way, blocking plate, tool head, and Orientation parts of tool head).
- Change gear wheel oil for worm wheel box.
- The equipment has sign of putting oil in.
- Tighter the bolts periodically in fixing parts.
 - Adjusting the bolts periodically in slide way. Make it not only work correctly but also be sure the distance between them.
 - 2) Adjusting the bolts in paralleling movement small board (Fig3.1). Tighten the bolts in the upper place of the paralleling movement small board. After using the machine a period of time, push the paralleling movement small board according to the direction (Fig3.2), loosening the fixing bolt on the upper place of the paralleling small board. Adjust the slide block and bolts. Then tighten all the bolts. (The bolts shouldn't be neither too tight nor loose.)
 - 3) Adjust the bolts in the four paws blocking plate (Don't be too tighten.)

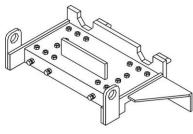


Fig3.1 Fig3.2

• Check the tension and tighten of the belt. If it needs adjusting, get down the belt cover adjust the tension and tighten.

3.2 Storage

Properly preserved if the machine won't be used for a long time.

- 1) Lower the lift boom.
- 2) Take block plate back.
- 3) Pull out the electrical plug.
- 4) Spread oil on the sliding groove of bracket.
- 5) Clear away the tanker.
- 6) Spread oil on cross-axle of assembly.

Appendix I: Operational principle drawing

错误! 未指定主题。

NUMBER	MANE	MODEL	QUANTITY
Y1	THICK HYDRAULIC CYLINDER	TG⊄ 95*200	1
Y2	LING HYDRAULIC CYLINDER	TG ⊄50*1000	1
Y3	SHORT HYDRAULIC CYLINDER	TG⊄ 50*380	1
Y4	PRESSING METER	Y-40	1
1、2	ASSEMBLY OF SQUARE BEND AND	GPU 6-1-4UMPa1200	2
	PIPE		
3、5、6	STRAIGHTWAY FOUND PIPE JOINT	GPU 6-1-4UMPa880	3
4	STRAIGHTWAY FOUND PIPE JOINT	GPU 6-1-4UMPa1520	1
7	HYDRALIC CYLINDER TIE-IN	TG⊄ 8*140	1
8	HYDRALIC CYLINDER TIE-IN	TG ⊄8*105	1
M2	MOTOR	Y-90L4	1
F1	HYDRAULIC LOCK	TGF-YS6	1
F2	ROTARY PIPE JOINT	TGF-HJ4	1
F3	CHECK VALVE	TGF-DC6C	1
F4	RELIEF VALVE	TGF-YL4-C	1
F5	HYDRAULIC FILTER	TGL-M18	1
DF1~DF3	HYDRAULIC SOLENOID VALVE	4WE6E61/CG24	3
С	GEAR PUMP	CBK-2.5	1
Р	FEED OIL CIRCUIT		
Т	BACK OIL CIRCUIT		

Appendix II: Circuit diagram

错误! 未指定主题。

错误! 未指定主题。

Appendix III: CE Declaration of Conformity



LAUNCH TECH. CO., LTD.
Add: Launch Industrial Park, North of Wuhe Avenue, Add: Launch Industrial Park, North of Wuhe Avenue, Banxuegang, Bantian, Longgang, Shenzhen, Guangdong, P.R. China Zip Code: 518112 Tel: 86-755-84528859 Fax: 86-755-84528872 http://www.cnlaunch.com

CE Declaration of Conformity

For the following equipment:

(Product Name) Tyre Changer

(Model Designation) TWC-802, TWC-801

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Low Voltage Directive (2006/95/EC) and Machinery Directive(2006/42/EC). For the evaluation regarding the Directives, the following standards were applied:

EN 60204-1:2006+A1:2009	
EN ISO12100-1:2003+A1:2009	Maria Artis
EN ISO12100-2:2003+A1:2009	
FN ISO14121-1:2007	

The following importer/manufacturer is responsible for this declaration:

(Company Name, Importer/Manufacturer)

Launch Tech Co., Ltd.

(Company Address, Importer/Manufacturer)

Launch Industrial Park, North of Wuhe Rd., Banxuegang, Longgang, Shenzhen, China

Person responsible for this declaration:

(Name, Surname, Importer/Manufacturer) James. Jiang (Position/Title) Vice President

(Legal Signature)

Launch Industrial Park, North of Wuhe Rd., Banxuegang, Longgang, Shenzhen, China (Date) June.29,2012

Warranty

THIS WARRANTY IS EXPRESSLY LIMITED TO PERSONS WHO PURCHASE LAUNCH PRODUCTS FOR PURPOSES OF RESALE OR USE IN THE ORDINARY COURSE OF THE BUYER'S BUSINESS.

LAUNCH electronic product is warranted against defects in materials and workmanship for one year (12 months) from date of delivery to the user. This warranty does not cover any part that has been abused, altered, used for a purpose other than for which it was intended, or used in a manner inconsistent with instructions regarding use. The exclusive remedy for any automotive meter found to be defective is repair or replacement, and LAUNCH shall not be liable for any consequential or incidental damages. Final determination of defects shall be made by LAUNCH in accordance with procedures established by LAUNCH. No agent, employee, or representative of LAUNCH has any authority to bind LAUNCH to any affirmation, representation, or warranty concerning LAUNCH automotive meters, except as stated herein.

Disclaimer

THE ABOVE WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Order Information

Replaceable and optional parts can be ordered directly from your LAUNCH authorized tool supplier. Your order should include the following information:

- Quantity
- Part number
- Item description

Customer Service

If you have any questions on the operation of the unit, please contact us:

Tel: 86-755-84528767

If your unit requires repair service, return it to the manufacturer with a copy of the sales receipt and a note describing the problem. If the unit is determined to be in warranty, it will be repaired or replaced at no charge. If the unit is determined to be out of warranty, it will be repaired for a nominal service charge plus return freight. Send the unit pre-paid to:

Attn: Overseas Department
LAUNCH TECH. CO., LTD.
Launch Industrial Park,
North Wuhe Avenue,
Banxuegang Industrial park,
Longgang District.,
Shenzhen, Guangdong Province, P. R. China